



## PUZZLE JOINT SYSTEM

### BACKGROUND

The present invention relates generally to joining wood products, and more particularly, to a puzzle joint system for use in joining wood products such as chair and table components, and the like.

5       In carpentry, a joint is formed at the junction of two or more members of a framed structure. The object of a joint is to fix two members together so that the joint has the greatest possible mechanical strength and is as unobtrusive as possible. Though there are many joints in use, they fall into a few basic groups, and which are variations or elaborations of simple concepts. In general, practically all joints are based on handwork, 10 and with few exceptions most machine-made joints have the traditional patterns. Most joints rely involve mechanical fittings and glue for their strength.

15      Heretofore, wooden components have been joined together using a variety of joints. Common types of joints include a butt joint, a dovetail joint that is used to join two flat members together at right angles, such as the sides of a drawer; a dowelled joint that uses dowels to impart mechanical strength, and a mortise and tenon joint that is used to join a horizontal member with the vertical member of a frame. The present invention provides for an improvement over these conventional joints.

20      A computer search of the US Patent and Trademark Office patent database revealed five patents having the term "wood joint" in the title, and 35 patents having the term "wood joint" in the specification. Relevant patents having the term "wood joint" in the title include US Patent No. 5,203,389 entitled "Precision wood-joint making fixture